

Work Order ID 67316

Tuesday, March 15, 2011 10:15:13 AM



Page 1

Item ID: D350-636-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Toe Step, LH/RH

Start Date: 3/15/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 3/21/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan: H

Date: 11-03-15

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3487	Rev A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPPD350-636-101 CHG001

8 u603/31

BG 11-3-31

(12)

110

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg *** D3487-1***

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

6661.100

B11-3-21

P10→

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: D350-636-101 PAR #: _____ Fault Category: Small Fish/W-Jet NCR: Yes No DQA: 3 Date: 11/04/04
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: C Date: 11/04/05

NCR: <u>67316</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>11/03/21</u>	<u>110</u>	<u>Found a notch inside of AH x1 part.</u> <u>Set water set pass with pressure in line.</u> <u>p.c. machine malfunction</u>	<u>[Signature]</u>	<u>-Scrap + Destroy</u> <u>AH x1</u> <u>no replace</u>	<u>SB</u> <u>11/03/21</u>	<u>S</u> <u>11/03/21</u>	<u>[Signature]</u>	<u>S</u> <u>11/03/21</u>

NOTE: Date & initial all entries

Work Order ID 67316

Tuesday, March 15, 2011 10:15:13 AM



Page 2

Item ID: D350-636-101

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Setup Start



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Item Name: Toe Step, LH/RH

Start Date: 3/15/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 3/21/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120 QC2- Inspect parts off machine FAI/FAIB 0.00



QC Memo 0.00

Quality Control

B11-3-21

130 QC8- Inspect parts - second check 0.00



QC Memo 0.00

Quality Control

8/16/03/20

Y12

YU

150 NC BRAKE 0.00



Brake NC Memo 0.00

Brake NC

Form as per Dwg D3487

8/16/03/20

18

H

BTO

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: D350-636-101 PAR #: _____ Fault Category: Small fast NCR: Yes No DQA: [Signature] Date: 11/03/22
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: [Signature] Date: 11/04/22

NCR: 67316 <u>[Signature]</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/03/22	150	1 part crack at -16 and R.C process	<u>[Signature]</u> 10/31/22	Scrap & destroy no replace	<u>SD</u> 11/03/22	<u>S</u> 11/03/22	<u>[Signature]</u> 10/31/22	<u>[Signature]</u> 11/03/22

NOTE: Date & initial all entries

Work Order ID 67316

Tuesday, March 15, 2011 10:15:13 AM

Page 3

Item ID: D350-636-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Toe Step, LH/RH

Start Date: 3/15/2011 Start Qty: 10.00

Cust Item ID:

Required Date: 3/21/2011 Req'd Qty: 10.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC5- Inspect part completeness to step on W/O

0.00



8:103/22

QC

Memo

0.00

Quality Control

(110)

170

Chemical Conversion Coat per QSI005 4.1

0.00



0.00

HandFinish

Memo

Hand Finishing

10 BR 11-3-22

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



0.00

Powdercoat

Memo

Powder Coating

M115951

START TIME:

8:40

OVEN TEMPERATURE:

200 ° FINISH TIME:

9:10

10 BR 11-3-22

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67316

Tuesday, March 15, 2011 10:15:13 AM



Page 4

Item ID: D350-636-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Toe Step, LH/RH

Start Date: 3/15/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 3/21/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190

Wing Walk as per dwg QSI005 4.4 Batch *M116400*

HandFinish

Memo

0.00

Hand Finishing

X10 4 11/03/12

200

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

M 11 03 24 10

210

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-636-101

Location: *2*PPP Rev: *A**11/3/30 102*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67316

Tuesday, March 15, 2011 10:15:13 AM

Page 5

Item ID: D350-636-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Toe Step, LH/RH

Start Date: 3/15/2011 Start Qty: 10.00

Cust Item ID:

Required Date: 3/21/2011 Req'd Qty: 10.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

QC21- Final Inspection - Work Order Release , . . 0.00



QC

Memo

0.00

Quality Control

11/3/31

CMF

11-03-31

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

Tuesday, March 15, 2011 10:15:19 AM

Work Order ID: 67316

Parent Item: D350-636-101

Parent Item Name: Toe Step, LH/RH



Start Date: 3/15/2011

Required Date: 3/21/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A New Issue 06-03-03 JLM
11.03.15 now made in house DD verf:JLM

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M6061T6S.100

Purchased

No

110

sf

60.6488

0.7942

8.36

10.



1311-3-21

6061-T6 .100 Sheet

Location

Loc Qty

Loc Code

MAT21

26.17

102201

26.17

MAT5

34.47877902

102201

34.4787790

102201

(12)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

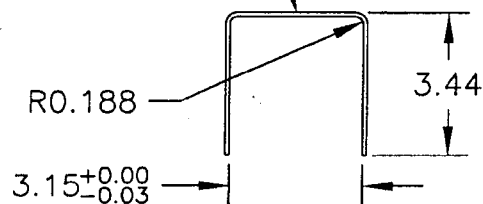
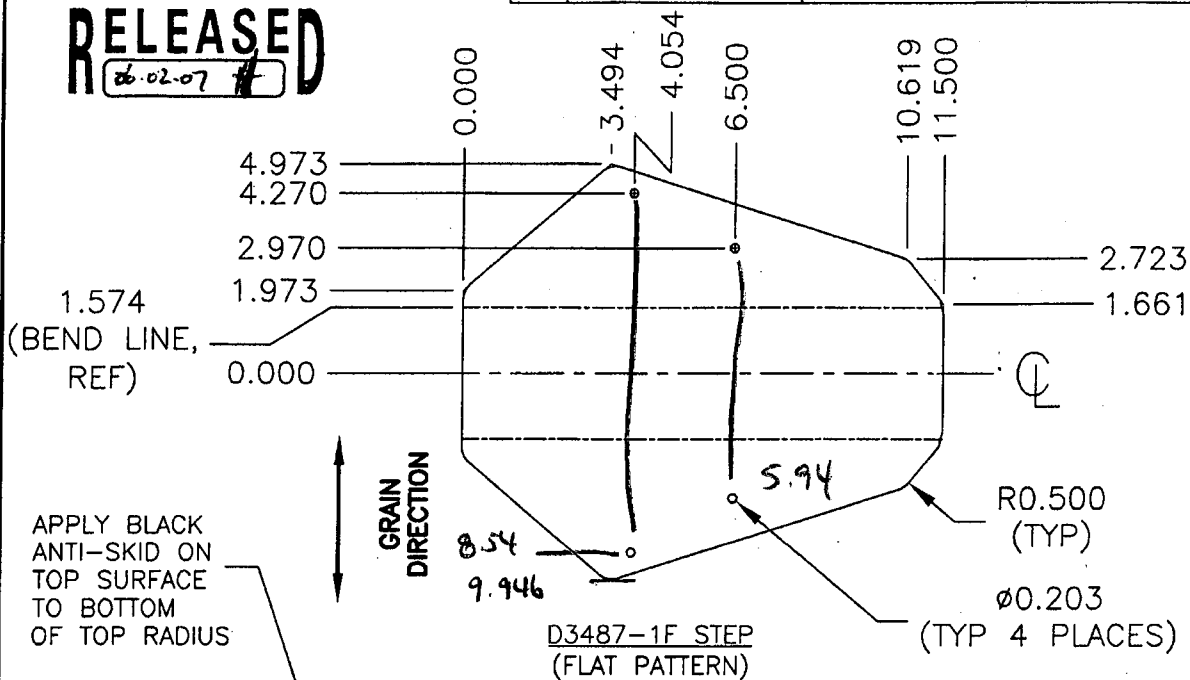
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN PH	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D3487	REV. A SHEET 1 OF 1
DATE 06.01.16	TITLE STEP		SCALE 1:4
A	06.01.16	NEW ISSUE	

RELEASED
26-02-07

D3487-1 STEP
(BENDING DETAIL)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67316

2/11-03-15

D3487-1 STEP

- 1) MATERIAL: ALUMINUM 6061-T6/T651 ALUMINUM (QQ-A-250/11) 0.100 THICK
(REF DART MATERIAL SPEC M6061T6S.100)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT TO TOP SURFACE PER DART QSI 005 4.4
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) PART IS SYMMETRICAL ABOUT CENTERLINE
- 6) BREAK UNMARKED EDGES 0.005 TO 0.010 MAX

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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 67316
Description: TOE STEP LH/RH		Part Number: D3487-1
Inspection Dwg: D3487-1, Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .703	± .005 - .001	.706	>		V HB02	
3.494	± .010	3.494	>		V	
4.054	± .010	4.050	>		V	
6.500	± .010	6.499	>		V	
10.619	± .010	10.619	>		PROWS02	
11.500	± .010	11.505	>		P	
1.973	± .010	1.973	>		V	
2.970	± .010	2.970	>		V	
4.276	± .010	4.270	>		V	
4.973	± .010	4.973	>		V	
.100	± .010	.100	>		V	

Measured by: AB	Audited by: S	Prototype Approval:
Date: 11-3-21	Date: 11/03/21	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	